

# INTELLECTUAL PROPERTY – SO WHAT?

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**The Academic Health Science Network for the North East and North Cumbria  
Limited (AHSN NENC)**

**Physicist by trade and seven years experience as a patent attorney in  
the UK before joining AHSN NENC**

# THE AHSN NENC

The AHSN Network consists of 15 regional Academic Health Science Networks (AHSNs), established by NHS England in 2013 to spread innovation at pace and scale

Each AHSN serves a distinct geography and we work across the North East and North Cumbria region to support innovation in all its forms within the NHS, social care and the regional healthcare sector

We work with our Member Organisations including NHS Trusts, CCGs and universities, as well as the regional industry sector, to identify, evaluate, adopt and disseminate transformative innovation



Health  
Network  
North

Health Network North is a membership-based Network created by The AHSN NENC

Supports the adoption of appropriate solutions across the region and the rest of England, and drives patient care through the development of a new and improved products and services

Dedicated workshops providing opportunities for networking and specialist training for both the NHS and industry

# **BIG QUESTION....**

## **WHAT IS INTELLECTUAL PROPERTY (IP)?**

A legal framework that protects ideas, concepts, innovations and the results of mental effort

# WHAT IS THE AIM OF IP?

To protect an idea, concept, information, innovation

IP rights grant a monopoly right over an idea, concept, innovation so that the owner of the IP rights can stop others from using the IP without their permission

# DIFFERENT CATEGORIES OF IP

- Patents
- Trade marks
- Copyright
- Registered designs
- Unregistered design rights
- Know how / Trade secrets
- Database Rights



# TWO DIFFERENT TYPES OF IP

## **IP requiring registration**

Patents

Trade marks

Registered designs

## **IP not requiring registration**

Unregistered design rights

Copyright

Know how / Trade secrets

Database rights

# BASICALLY, YOU CAN PROTECT....

The way it works	PATENTS (20 years)
The way it looks	REGISTERED DESIGNS (25 years)
What you call it	TRADE MARK (forever)
What it says	COPYRIGHT (generally 70 years)

# A MORE DETAILED LOOK AT THE DIFFERENT CATEGORIES OF IP....

# TRADE MARKS

You can protect: -

- words
- logos
- slogans
- sounds
- colours
- shapes
- smells



Purple in relation to milk chocolate

Microsoft



Nike



Registered in relation to certain specified classes of goods and services which reflect how the trade mark will be used in reality

Select classes which you are trading in, or which you intend to trade in

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## CLASS 9

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# THE FUTURE'S BRIGHT, THE FUTURE'S ORANGE

2025222 28 June 1995(09, 16, 37, 38)

Honest concurrent use with Registration No. 1542752 (6035,4596).

### Class 9:

Telecommunications apparatus and instruments; accessories for telephones and telephone handsets; telephones; paging apparatus; radio paging and radio telephone apparatus and instruments; magnetic cards; batteries, aerials, satellite transmitters and receivers; parts and fittings for all the aforesaid goods; all for use in or relating to telecommunications.

### Class 16:

Printed matter; magazines; printed publications; writing instruments; stationery; instructional and teaching materials.

### Class 37:

Installation, maintenance and repair of telecommunications apparatus and systems.

### Class 38:

Telecommunications, communications, telephone, facsimile, telex, message collection and transmission, radio-paging and electronic mail services; transmission and reception of data and of information; on-line information services relating to telecommunications; data interchange services; transfer of data by telecommunications; satellite communication services; broadcasting or transmission of radio or television programmes; hire, leasing or rental of apparatus, instruments, installations or components for use in the provision of all the aforementioned services; advisory, information and consultancy services relating to all the aforementioned services.

**Orange Personal Communications Services Limited**, St James Court, Great Park Road, Almondsbury Park, Bradley Stoke, Bristol, BS12 4QJ.

**Agent:** R.G.C. Jenkins & Co., 26 Caxton Street, London, SW1H 0RJ.

## CLASS 32

2000546 31 October 1994 (32)



Proceeding because of distinctiveness acquired through use.

The mark consists of the three dimensional bottle as represented above.

Non-alcoholic beverages.

**The Coca-Cola Company**, P.O. Drawer 1734, Atlanta, Georgia 30301, United States of America.

**Agent:** Carpmaels & Ransford, 43 Bloomsbury Square, London, WC1A 2RA.



**TESCO**  
Every little helps



**007<sup>F</sup>**

**SUBWAY**  
eat fresh.



You cannot register a mark that is: -

Identical / similar to one already used in respect of similar / identical goods

Too descriptive, that is, not distinctive and not recognisable as a trade mark



The duration of a trade mark registration can be forever, provided the renewal fees are paid to keep the registration in force

Always use the ® symbol to inform competitors that you have registered your trade mark and to warn them that they cannot use your trade mark without your permission

Until the trade mark is successfully registered, use the ™ symbol, which informs competitors that you are using the word / logo etc. as a trade mark, and that you may at some point register it

Without a trade mark registration, you would need to rely on “passing off” to take action against a competitor, which protects you from others pretending that their goods or services are your goods and services - not as powerful as trade mark registration

# REGISTERED DESIGNS

Protects the outward appearance of a product

Shape and configuration / Pattern and ornament

Could relate to a product itself or it could be its packaging

Must be new and have individual character

Must relate to non-functional features

Duration is 25 years provided the renewal fees are paid to keep the registration in force

A registered design prevents others from making, using, selling, keeping or offering for sale, or importing a product to which the design is applied

Currently no robust substantive examination of the design in the UK by The Intellectual Property Office before it is granted

Generally significantly cheaper than a patent

Can be relatively easy to circumvent by a competitor!

# UNREGISTERED DESIGN RIGHT

Automatic protection upon creation of design

Protects the outward appearance of design

Design must be new

Only prevents copying- the owner has to prove that copying took place

Duration is 10 years from first marketing, or 15 years from creation

# COPYRIGHT

Unregistered protection - automatic protection upon creation of work

Protects the ***physical expression*** of idea or content – does not protect the idea itself

Protection includes: -

- Original literary, dramatic, musical and artistic works

- Software

- Booklets, assessment packages, learning packages

Appropriate copyright statements are very important

© [Year of Creation] [Owner]

Not obligatory but recommended

Have to prove that copying has taken place to prove that a third party has infringed your copyright - often difficult in practice

It is not ***how much*** has been copied, it is ***what*** has been copied

It lasts a long time....

Copyright prevents others from copying, issuing copies to the public, performing or showing, or renting out, the work, without the owner's permission

“Fair dealing” exception for the purposes of research or study

Presentations - material on the internet such as photographs and images

Ask permission!

Create your own!

Stock photos may be safer!

# KNOW HOW / TRADE SECRETS

Practical knowledge of how to get something done

Secret information

Unpatented inventions

Formulae

Procedures and methods

Accumulated skills and experience

Intention to keep it secret

Economic value - its transfer can form part of the IP transferred in an assignment



# DATABASE RIGHTS

Similar to copyright

Skill and effort in the compilation of information – “Yellow Pages”

Automatic right

Duration of 15 years from publication

# PATENTS

A time limited monopoly granted by the Government in return for full disclosure of the invention

20 years from the filing date

The monopoly is defined by the claims at the end of the specification

A “negative right” that stops other from working your invention

It is not a right to work your invention - You may be blocked by another patent that you are infringing....more about this later!

# WHAT RIGHTS DO PATENTS AFFORD?

**When the invention is a product**, the ability to prevent others from

Making the product

Using the product

Disposing of (i.e. selling) the product or offering to do so

Importing the product

Keeping the product whether for disposal or not

**When the invention is a method**, the ability to prevent others from using the method or offering it for use, when it is reasonable to assume that use of the method without the patent owner's permission, would constitute an infringement

Have to apply for a patent at the UK Intellectual Property Office

Registered right

Search and examination

Usually have to argue for allowance with Examiners

Standards can vary greatly

Patent rights are territorial

The invention may be: -

A product

Parts or features of products

Method of manufacturing product

Apparatus for manufacturing a product

# WHAT DOES A PATENT PROTECT?

Inventions which are : -

novel

inventive (not obvious)

capable of industrial application

not excluded subject matter

# NOVELTY AND INVENTIVENESS

## Novelty

Look at prior art - all information made available to the public before the patent application has been filed, to decide on novelty

Poster presentations

Talks at conferences and seminars

Website disclosures

PhD theses

Books, journal articles

“Loose talk”

## Inventiveness

Would the difference be an **obvious** change to make?....

**KEEP DETAILS OF YOUR INVENTION A SECRET UNTIL THE PATENT APPLICATION HAS BEEN FILED!**

# CLOSEST PRIOR ART

Compare the invention with the closest prior art that you are aware of

Identify the novel features of the invention



# WHAT DOES “OBVIOUS” MEAN?

Consider whether or not the novel feature of the invention would have been an easy step for a person skilled in the art, to make

# SUBJECT MATTER EXCLUDED FROM PATENTABILITY

Discoveries, theories or mathematical methods

Literary, dramatic, musical or artistic works

Methods for performing a mental act, playing games or doing business

**A program for a computer (software)**

The presentation of information

Inventions contrary to public policy or morality

Methods of treatment or diagnosis of the human or animal body by surgery or therapy

**Plant or animal varieties or essentially biological processes for the production of plants or animals (biotechnology)**

# BIOTECHNOLOGY

According to the European Patent Convention (EPC), “biotechnological inventions” are inventions which concern a product consisting of or containing biological material or a process by means of which biological material is produced, processed or used

# THE FOLLOWING BIOTECHNOLOGY RELATED INVENTIONS CAN BE PATENTABLE

Proteins/nucleic acids that may have therapeutic/diagnostic benefit (blocking/activating agents; screening methods)

Genetic markers

**New uses of existing agents/combinations of known agents**

Genetically modified animals and plants

Time and amount of administration of therapeutics (dosage regimes)

Laboratory equipment

# THE FOLLOWING BIOTECHNOLOGY RELATED INVENTIONS ARE NOT PATENTABLE

Processes for cloning human beings

Processes for modifying the gene line of humans (i.e. transgenic humans)

Uses of human embryos in industry

Processes for modifying the genetic identity of animals which are likely to cause suffering without any substantial medical benefit

# WHAT ABOUT....?

A method of treating cancer comprising extracting a tumour using device Z or supplying a protein ABC - **NO**

Device Z – **YES**

Protein ABC for use in the treatment of cancer - **YES**

# SOFTWARE

Current interpretation is that an invention is patentable if it provides a new and inventive technical solution to a technical problem.

Computer programs are patentable to the extent that they provide a technical contribution to the prior art, which means that it provides a further technical effect that goes beyond the normal physical interaction between the program and the computer

Same criteria for patentability as other inventions

# So Now for the “Negative Right” Paradox....



# PATENTABILITY OF YOUR OWN INVENTION vs INFRINGEMENT OF ANOTHER'S PATENT

Two completely different issues – keep them separate!

## Example

Invention A – A device comprising features A B C

Prior art invention X – A device comprising features A B

If feature C is inventive, and has a technical advantage, then Invention A is patentable over prior art invention X - **Great!**

However, if prior art invention X has a granted patent (Patent X) directed to a device comprising features A B, then Invention A would infringe Patent X – so the owner of the patent for Invention A would be prevented from working his invention, even though he has a patent for it - **Not so great!**

# WHAT DOES A PATENT SPECIFICATION INCLUDE?

## Description of the Invention

## Claims

Very important

Define the extent of protection you will achieve

Not too broad so that it is not distinguished from what is known

Not so narrow that the patent is easy to circumvent by competitors

## Drawings

## Abstract

# The “Guinness Widget”

1. A beverage package comprising a sealed, non-resealable, container having a primary chamber containing beverage having gas in solution therewith and forming a primary headspace comprising gas at a pressure greater than atmospheric; enclosure means defining a secondary chamber having a volume less than said primary chamber; restrictor means defining a restricted orifice, said secondary chamber communicating with the beverage in said primary chamber through said restricted orifice; said secondary chamber containing beverage supplied thereto from the beverage in the primary chamber and having a secondary headspace therein comprising gas at a pressure greater than atmospheric so that the pressures within the primary and secondary chambers are substantially at equilibrium; said container is openable to expose the primary headspace to atmospheric pressure, and wherein the secondary chamber is arranged so that upon opening of the container the pressure differential caused by the decrease in pressure at the primary headspace causes beverage in the secondary chamber to be ejected by way of the restricted orifice into the beverage of the primary chamber and said ejection causes gas in the solution to be evolved and form, or assist in the formation of, a head of froth on the beverage.

Always ask a patent attorney to prepare, file, and prosecute a patent application for you, to ensure that you obtain broad and robust rights for your invention that will add value to your business

(The same goes for trade mark applications and design applications, although they can sometimes seem more do-able by yourself)

# WHO OWNS THE PATENT?

Can be a tricky question!

When commissioning work to be done, agree on IP ownership at the outset

In the UK and Europe, when employees in their place of work invent something, then **SOMETIMES**, the employer owns the invention

- Course of normal everyday duties

- Duties specifically assigned

- Expected that an invention would result

- “Employed to invent”

# IS MY INVENTION PATENTABLE?

Ask yourself: -

How is it different from what is already available?  
Is that difference an “obvious” change to make?

Online patent searching

Espacenet database

Keyword in title or abstract

Applicant’s name

Ask a patent attorney!

# AN EXAMPLE OF HOW INTELLECTUAL PROPERTY IS USED



Names, brands and logos – trade marks to indicate trade origin

← Apple®

← iPod®

Operating software – copyright and patent

'Clickwheel' – patent to protect invention



← Overall appearance – registered design to protect product appearance

# WHAT DOES THIS MEAN FOR APPLE®?

Nobody can sell products under the same / similar name

SONY ipod – not allowed

Iplod – not allowed

Nobody can make or sell products that look the same

Nobody can make or sell products incorporating the “clickwheel” technology

Nobody can copy (copyright) or indeed, make or sell products incorporating (patent), the operating software



# THE INTERNATIONAL PERSPECTIVE ON PATENTS

Patents are territorial in nature and protection can be obtained at home and abroad

File separately in countries of interest

File as a single “international” patent application covering large number of countries and then choose the countries of interest later on

File as a single “European” patent application covering most European countries

Varying degrees of robustness in the patenting process in different countries

The quality of the searching and examination process can vary a lot

An invention may be granted a patent by the national patent office of one country, but another country may refuse to grant it on account of prior art found in a search they have carried out

Granted patents may therefore be open to attack

# USING IP

Effective management of existing IP portfolio

Appropriate commercialisation

Enforcement of IP to stop infringement / Deterrent

Valuation of IP and performance

Due diligence in connection with third party IP

# COMMERCIALISING IP – LICENCE AGREEMENTS AND ASSIGNMENTS

Commercialising something of value  
Used to generate income

IP is often worth more when it is actually USED, although do not underestimate its value as a deterrent alone

An assignment transfers the IP rights from the assignor to the assignee  
("Selling a Car")

A licence does not transfer the IP rights, it merely gives the licensee permission to work the invention under certain terms and conditions  
("Hiring a Car")

**Licensing in** is the harvesting of IP rights from a third party under certain specific terms and conditions

**Licensing out** is the granting of rights in your own IP to a third party

A good way to extend your business to markets that you might not otherwise have been able to penetrate, both from a market and territory perspective

# DIFFERENT CATEGORIES OF LICENCE

## Standard clauses

Term of the licence – think carefully!

Protects licensor if value of licence increases or if market conditions change

Ensure that no licence extends beyond term of intellectual property ownership

Territories covered

Targets

Who is going to pay any IP protection costs?

What are the royalty provisions and sign up fee?

Royalty on whole product or just a portion?

Well organised and accurate accounting is a must

Track sales

Auditing if required

**Exclusive licence** - Grants the licensee the rights to the exclusion of all others, including the licensor

**Non-exclusive licence** - Grants the licensee rights, but potentially, other licensees too

**Sole licence** - Grants the licensee rights to the exclusion of all others apart from the licensor

Royalty rates and sign up fee negotiable

# THIRD PARTY COLLABORATIONS

You may not be able to achieve everything yourself!

Third party companies

Research institutions / universities

Background IP – who owns it? Do they remain the owner, going forward?

Foreground IP – who will own it?

Can add credibility to a project

Can provide advantages in terms of more options for potential funding opportunities

Robust agreements are a must

IP ownership

Who will do what?

Joint ownership of IP is far from ideal although it can sometimes appear to be the easy option



# IP ENFORCEMENT

Litigation is expensive

IP insurance is expensive

Use as a deterrent only?

# IP STRATEGY

When to file your patent application?

One year from filing to add new material to the patent specification

Watching your competitor's IP protection activity

IP Journals

IP watching services

Strategic filing in one country to restrict competitor from obtaining IP protection for something the same or similar

Strategic filing to restrict competitor activity even if not planning on commercialising the IP yourself

Take particular care of your core IP

# PATENT BOX

UK companies who are the owners of a qualifying UK patent

Welcome relief from HMRC

Corporation tax rate of only 10% payable on the profit from worldwide income generated by the product

# BREXIT

When it comes to patents in Europe, it is business as usual

The European Patent Office is not an EU institution

**....BUT IS REGISTERING IP WORTH IT?**

It depends!!!!!!!

# PROs....

IP is an “intangible asset” that adds substantial value to a business and increases revenues

IP protects and rewards creativity/inventiveness of a business

IP provides business with competitive advantage in marketplace – provides a deterrent

IP can be exploited by licence agreements to earn royalties and it can justify the investment in business

# CONS....

It is expensive, especially overseas (EU and US are popular)

When considering “elsewhere,” always ask yourself the question – WHY?

Exception – if you already have a market there

# FOOD FOR THOUGHT....

If a competitor is going to copy, then they will PROBABLY do it anyway

BUT, if you have IP protection, they MIGHT think twice

Without IP protection, you could not do anything even if they DID copy



The lesson isn't "DON'T PROTECT IP"

The lesson is "THINK CAREFULLY BEFORE YOU DO"

# REMEMBER – JUST BECAUSE SOMETHING HAS A GRANTED PATENT, DOESN'T NECESSARILY MEAN THAT IT IS A GOOD PRODUCT!

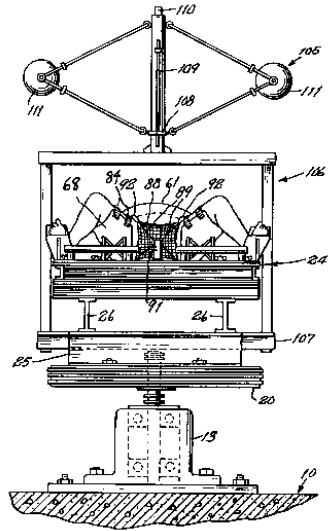


Fig. 3.

## Apparatus for Facilitating the Birth of a Child by Centrifugal Force

Patent no.3,216,423

Issued: November 9, 1965

Inventors: George and Charlotte Blonsky, New York, NY

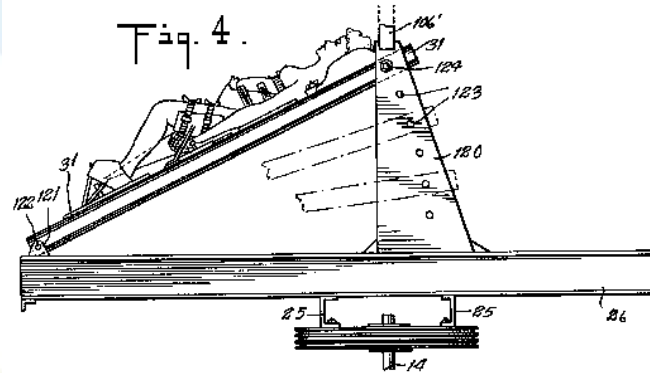


Fig. 4.

